## **CLAIMS**

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## 1. A sulfonamide compound of general formula (la)

wherein

R<sup>1</sup> represents an –NR<sup>8</sup>R<sup>9</sup> radical or a saturated or unsaturated, optionally at least mono-substituted, cycloaliphatic radical, which may optionally contain at least one heteroatom as a ring member and/or which may be condensed with a saturated or unsaturated, optionally at least monosubstituted mono- or bicyclic cycloaliphatic ring system, which may optionally contain at least one heteroatom as a ring member,

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup> and R<sup>7</sup>, identical or different, each represent hydrogen, halogen, nitro, alkoxy, cyano, a saturated or unsaturated, linear or branched, optionally at least mono-substituted aliphatic radical or an optionally at least mono-substituted phenyl radical or an optionally at

least mono-substituted heteroaryl radical,

R<sup>5</sup> represents hydrogen or a saturated or unsaturated, linear or branched, optionally at least mono-substituted aliphatic radical,

R<sup>8</sup> and R<sup>9</sup>, identical or different, each represent hydrogen or a saturated or unsaturated, linear or branched, optionally at least mono-substituted aliphatic radical,

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with the proviso that  $R^8$  and  $R^9$  are not hydrogen at the same time, and if one of them,  $R^8$  and  $R^9$ , represents a saturated or unsaturated, linear or branched, optionally at least mono-substituted  $C_1$ - $C_4$  aliphatic radical, the other one represents a saturated or unsaturated, linear or branched, optionally at least mono-substituted aliphatic radical with at least five carbon atoms, or

R<sup>8</sup> and R<sup>9</sup> together with the bridging nitrogen atom form a saturated or unsaturated, optionally at least mono-substituted heterocyclic ring, which may contain at least one additional heteroatom as a ring member and/or which may be condensed with a saturated or unsaturated, optionally at least mono-substituted, mono- or bicyclic cycloaliphatic ring system which may optionally contain at least one heteroatom as a ring member,

A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, which may be bonded via an optionally at least mono-substituted alkylene, alkenylene or alkynylene group and/or which may contain at least one heteroatom as a ring member in one or more of its rings,

and

n is 0, 1, 2, 3 or 4;

optionally in form of one of its stereoisomers, preferably enantiomers or diastereomers, its racemate or in form of a mixture of at least two of its stereoisomers, preferably enantiomers or diastereomers, in any mixing ratio, or a salt thereof, preferably a corresponding, physiologically acceptable salt thereof, or a corresponding solvate thereof.

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- 2. A compound according to claim 1, characterized in that R<sup>1</sup> represents an -NR<sup>8</sup>R<sup>9</sup> radical or a saturated or unsaturated, optionally at least monosubstituted 5- or 6-membered cycloaliphatic radical which may optionally contain at least one heteroatom as a ring member and/or which may be condensed with a saturated or unsaturated, optionally at least monosubstituted mono- or bicyclic cycloaliphatic ring system, which may optionally contain at least one heteroatom as a ring member, whereby the rings of the ring system are 5- or 6-membered,
- preferably R<sup>1</sup> represents an -NR<sup>8</sup>R<sup>9</sup> radical or a radical chosen from the group consisting of

, and 
$$\mathbb{R}^{10}$$

wherein, if present, the dotted line is an optional chemical bond, and  $R^{10}$  represents hydrogen, a linear or branched  $C_1$ - $C_6$  alkyl radical or a benzyl radical, preferably hydrogen or a  $C_1$ - $C_2$  alkyl radical.

3. A compound according to claim 1 or 2, characterized in that R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup> and R<sup>7</sup>, identical or different, each represent hydrogen, a linear or branched, optionally at least mono-substituted C<sub>1</sub>-C<sub>6</sub> alkyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkenyl radical or a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkynyl radical,

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preferably  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$  and  $R^7$ , identical or different, each represent hydrogen or a linear or branched, optionally at least mono-substituted  $C_{1-}$   $C_6$  alkyl radical,

- more preferably R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup> and R<sup>7</sup> each represent hydrogen or C<sub>1-2</sub> alkyl.
  - 4. A compound according to one or more of claims 1 to 3, characterized in that R<sup>5</sup> represents hydrogen, a linear or branched, optionally at least mono-substituted C<sub>1</sub>-C<sub>6</sub> alkyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkenyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkynyl radical,
    - preferably  $R^5$  represents hydrogen or a linear or branched, optionally at least mono-substituted  $C_1$ - $C_6$  alkyl radical,
    - more preferably R<sup>5</sup> represents hydrogen or a C<sub>1</sub>-C<sub>2</sub> alkyl radical.
- 5. A compound according to one or more of claims 1 to 4, characterized in that R<sup>8</sup> and R<sup>9</sup>, identical or different, each represent hydrogen, a linear or branched, optionally at least mono-substituted C<sub>1</sub>-C<sub>10</sub> alkyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>10</sub> alkenyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>10</sub> alkynyl radical,

or

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R<sup>8</sup> and R<sup>9</sup> together with the bridging nitrogen atom form a saturated or unsaturated, optionally at least mono-substituted 5- or 6-membered heterocyclic ring which may contain at least one additional heteroatom as a ring member and/or which may be condensed with a saturated or unsaturated, optionally at least mono-substituted mono- or bicyclic

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cycloaliphatic ring system, which may optionally contain at least one heteroatom as a ring member, whereby the rings of the ring system are 5-6- or 7-membered.

5 6. A compound according to claim 5, characterized in that R<sup>8</sup> and R<sup>9</sup>, identical or different, each represent hydrogen or a linear or branched C<sub>1</sub>-C<sub>10</sub> alkyl radical, or

R<sup>8</sup> and R<sup>9</sup> together with the bridging nitrogen atom form a radical chosen from the group consisting of

$$-N$$
 $N-R^{11}$ 
 $-N$ 
 $0$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 

wherein  $R^{11}$ , if present, represents hydrogen, a linear or branched  $C_1$ - $C_6$  alkyl radical or a benzyl radical, preferably hydrogen, or a  $C_1$ - $C_2$  alkyl radical.

7. A compound according to one or more of claims 1 to 6, characterized in that A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, wherein the ring(s) is/are 5- or 6-membered, which may be bonded via an optionally at least mono-substituted C<sub>1</sub>\_C<sub>6</sub> alkylene group, an optionally at least mono-substituted C<sub>2</sub>\_C<sub>6</sub> alkenylene group or an optionally at least mono-substituted C<sub>2</sub>\_C<sub>6</sub> alkylene group and/or wherein the ring(s) may contain at least one heteroatom as a ring member,

preferably A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, wherein the ring(s) is/are 5- or 6-membered and wherein one or more of the rings contain at least one heteroatom,

or a radical chosen from the group consisting of

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wherein X, Y, Z, independently from one another, each represent a radical selected from the group consisting of hydrogen, fluorine, chlorine, bromine, nitro, acetyl, linear or branched  $C_1$ - $C_6$  alkyl, linear or branched  $C_1$ - $C_6$  alkoxy, linear or branched  $C_1$ - $C_6$  alkylthio, a trifluoromethyl radical, a cyano radical and a -NR<sup>12</sup>R<sup>13</sup> radical,

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wherein  $R^{12}$  and  $R^{13}$ , identical or different, each represent hydrogen or linear or branched  $C_1$ - $C_6$  alkyl,

W represents a single chemical bond between the two rings, a CH<sub>2</sub>, O, S group or a NR<sup>14</sup> radical,

wherein R<sup>14</sup> is hydrogen or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl,

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m is 0, 1, 2, 3 or 4 and

m1 is 1 or 2.

- 10 8. A compound according to one or more of claims 1 to 7 chosen from the group consisting of
  - [16] N-[1-(2-pyrrolidine-1-yl-ethyl)-1H-indole-5-yl]-naphthalene-2- sulfonamide,

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[17] N-[1-(2-pyrrolidine-1-yl-ethyl)-1H-indole-5-yl]-naphthalene-1-sulfonamide,

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- [18] N-[1-(2-pyrrolidine-1-yl-ethyl)-1H-indole-5-yl]- 5-chloro-3-methylbenzo[b]thiophene-2-sulfonamide,
- [28] N-[1-(2-pyrrolidine-1-yl-ethyl)-1H-indole-5-yl]- ]-6-chloroimidazo[2,1-b]thiazole-5-sulfonamide,

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- [43] 5-chloro-3-methyl-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)benzo[b]thiophene-2-sulfonamide,
- [44] N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)naphthalene-2-sulfonamide,

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[45] N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)naphthalene-1-sulfonamide,

- [46] 6-chloro-N-(1-(3-piperidin-1-yl)propyl)-1H-indol-5-yl)imidazo[2,1-b]thiazole-5-sulfonamide,
- 5 [47] 4-phenyl-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)benzenesulfonamide,

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- [48] 2-(naphth-1-yl)-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)ethanesulfonamide,
- [49] 4-phenoxy-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)benzenesulfonamide,
- [50] 3,5-dichloro-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)benzenesulfonylamide,
  - [51] 4,5-dichloro-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)thiophene-2-sulfonamide and
- 20 [52] 5-chloro-N-(1-(3-(piperidin-1-yl)propyl)-1H-indol-5-yl)naphthalene-1-sulfonamide,

optionally in form of their corresponding salts or their corresponding solvates.

## 9. A sulfonamide compound of general formula (Ib)

(lb)

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wherein

R<sup>1</sup> represents a –NR<sup>8</sup>R<sup>9</sup> radical.

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup> and R<sup>7</sup>, identical or different, each represent hydrogen, 10 halogen, nitro, alkoxy, cyano, a saturated or unsaturated, optionally at least mono-substituted, linear or branched aliphatic radical, or an optionally at least mono-substituted phenyl or an optionally at least mono-substituted heteroaryl radical,

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R<sup>5</sup> represents hydrogen or a saturated or unsaturated, linear or branched, optionally at least mono-substituted aliphatic radical,

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R<sup>8</sup> and R<sup>9</sup>, identical or different, each represent hydrogen or a saturated or unsaturated, linear or branched, optionally at least mono-substituted, C<sub>1</sub>-C<sub>4</sub> aliphatic radical,

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A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, which may be bonded via an optionally at least mono-substituted alkylene, alkenylene or alkynylene group and/or which may contain at least one heteroatom as a ring member in one or more of its rings,

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and n is 0, 1, 2, 3 or 4;

optionally in form of one of its stereoisomers, preferably enantiomers or diastereomers, its racemate or in form of a mixture of at least two of its stereoisomers, preferably enantiomers or diastereomers, in any mixing ratio, or a salt therof, preferably a corresponding, physiologically acceptable salt thereof, or a corresponding solvate thereof.

10. A compound according to claim 9, characterized in that R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup> and R<sup>7</sup>, identical or different, each represent hydrogen, a linear or branched, optionally at least mono-substituted C<sub>1-</sub>C<sub>6</sub> alkyl radical, a linear or branched, optionally at least mono-substituted C<sub>2-</sub>C<sub>6</sub> alkenyl radical, or a linear or branched, optionally at least mono-substituted C<sub>2-</sub>C<sub>6</sub> alkynyl radical,

preferably  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$  and  $R^7$ , identical or different, each represent hydrogen or a linear or branched, optionally at least mono-substituted  $C_{1-}$   $C_{6}$  alkyl radical,

more preferably  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$  and  $R^7$  each represent hydrogen or a  $C_{1\text{-}2}$  alkyl radical.

- 11. A compound according to claim 9 or 10, characterized in that R<sup>5</sup>

  represents hydrogen, a linear or branched, optionally at least monosubstituted C<sub>1</sub>-C<sub>6</sub> alkyl radical, a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkenyl radical or a linear or branched, optionally at least mono-substituted C<sub>2</sub>-C<sub>6</sub> alkynyl radical,
- preferably R<sup>5</sup> represents hydrogen or a linear or branched, optionally at least mono-substituted C<sub>1</sub>-C<sub>6</sub> alkyl radical,

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more preferably R<sup>5</sup> represents hydrogen or a C<sub>1</sub>-C<sub>2</sub> alkyl radical.

- 12. A compound according to one or more of claims 9 to 11, characterized in that R<sup>8</sup> and R<sup>9</sup>, identical or different, each represent hydrogen or a linear or branched, optionally at least mono-substituted C<sub>1</sub>-C<sub>4</sub> alkyl radical,
  - preferably  $R^8$  and  $R^9$ , identical or different, each represent hydrogen or a  $C_1$ - $C_2$  alkyl radical,
- with the proviso that R<sup>8</sup> and R<sup>9</sup> are not hydrogen at the same time.
  - 13. A compound according to one or more of claims 9 to 12, characterized in that A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, wherein the ring(s) is/are 5- or 6-membered, which may be bonded via an optionally at least mono-substituted C<sub>1</sub>—C<sub>6</sub> alkylene group, an optionally at least mono-substituted C<sub>2</sub>—C<sub>6</sub> alkenylene group or an optionally at least mono-substituted C<sub>2</sub>—C<sub>6</sub> alkylene group and/or wherein the ring(s) may contain at least one heteroatom as a ring member,

preferably A represents an optionally at least mono-substituted mono- or polycyclic aromatic ring system, wherein the ring(s) is/are 5- or 6-membered and wherein one or more of the rings contain at least one heteroatom,

or a radical chosen from the group consisting of

wherein X, Y, Z, independently from one another, each represent a radical selected from the group consisting of hydrogen, fluorine, chlorine, bromine, nitro, acetyl, linear or branched  $C_1$ - $C_6$  alkyl, linear or branched  $C_1$ - $C_6$  alkoxy, linear or branched  $C_1$ - $C_6$  alkylthio, a trifluoromethyl radical, a cyano radical and a -NR<sup>12</sup>R<sup>13</sup> radical.

wherein  $R^{12}$  and  $R^{13}$ , identical or different, each represent hydrogen or linear or branched  $C_1$ - $C_6$  alkyl,

W represents a single chemical bond between the two rings, a  $CH_2$ , O, S group or a  $NR^{14}$  radical,

wherein R<sup>14</sup> is hydrogen or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl,

m is 0, 1, 2, 3 or 4 and

20 m1 is 1 or 2.

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- 14. A compound according to one or more of claims 9 to 13 selected from the group consisting of
- N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-5-chloro-3-methylbenzo[b]thiophene-2-sulfonamide,
  - [2] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-naphthalene-2-sulfonamide,
  - [3] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-naphthalene-1-sulfonamide,
  - [4] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-5-chloronaphthalene-1-sulfonamide,
    - [5] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-benzenesulfonamide,
  - [6] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-quinoline-8-sulfonamide,
    - [7] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-phenoxybenzenesulfonamide,
- N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-methylbenzenesulfonamide,
  - [9] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-5-chlorothiophene-2-sulfonamide,
  - [10] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-benzo[1,2,5]thiadiazole-4-sulfonamide.

	[11]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-6-chloroimidazo[2,1-b]thiazole-5-sulfonamide,
5	[12]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-3,5-dichlorobenzenesulfonamide,
10	[13]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-3- bromobenzenesulfonamide,
	[14]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-3-nitrobenzenesulfonamide,
15	[15]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-1-phenylmethanesulfonamide,
	[19]	trans-N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-2-phenylethenesulfonamide,
20	[20]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4,5-dichlorothiophene-2-sulfonamide,
25	[21]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-acetylbenzenesulfonamide,
	[22]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4- bromobenzenesulfonamide,
30	[23]	N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-methoxybenzenesulfonamide,
	[24]	N-[3-(2-diethylaminoethyl)-1H-indole-5-yl]-5-chloro-3-

- methylbenzo[b]thiophene-2-sulfonamide,
- [25] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-nitrobenzenesulfonamide,

- [26] N-[1-(2-dimethylaminoethyl)-1H-indole-5-yl]-4-fluorobenzenesulfonamide,
- [27] N-[1-(2-diethylaminoethyl)-1H-indole-5-yl]-6-chloroimidazo[2,1-b]thiazole-5-sulfonamide,
  - [29] N-(1-(2-(diethylamino)ethyl)-1H-indol-5-yl)-naphthalene-2-sulfonamide,
- 15 [30] N-(1-(2-(diethylamino)ethyl)-1H-indol-5-yl)-naphthalene-1-sulfonamide,
  - [31] N-(1-(2-(diethylamino)ethyl)-1H-indol-5-yl)-4-phenylbenzenesulfonamide,

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- [32] 5-chloro-N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-3-methylbenzo[b]thiophene-2-sulfonamide,
- [33] N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-naphthalene-2-sulfonamide,
  - [34] N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-naphthalene-1-sulfonamide,
- 30 [35] 6-chloro-N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)imidazo[2,1-b]thiazole-5-sulfonamide,

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- [36] N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-4-phenylbenzenesulfonamide,
- [37] N-(1-(2-dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-2-(naphth-1-yl)-ethanesulfonamide,
  - [38] N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-4-phenoxy-benzenesulfonamide,
- 10 [39] 3,5-dichloro-N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)-benzenesulfonamide,
  - [40] N-(1-(2-(dimethylamino)ethyl)-2-methyl-1H-indol-5-yl)benzo[b]thiophene-3-sulfonamide,
  - [41] N-(1-(2-(diethylamino)ethyl)-1H-indol-5-yl)benzo[b]thiophene-3-sulfonamide and
- [42] N-(1-(2-(dimethylamino)ethyl)-1H-indol-5-yl)benzo[b]thiophene-3-sulfonamide,

optionally in form of their corresponding salts and their corresponding solvates.

25 15. A process for obtaining a sulfonamide derivative of general formula (Ia) and/or (Ib), according to one or more of claims 1 - 14, characterized in that at least one compound of general formula (II), or one of its suitably protected derivatives,

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wherein A has the meaning according to one or more of claims 1 - 14, and X is an acceptable leaving group, preferably an halogen atom, more preferably chlorine is reacted with at least one 5-aminoindole of general formula (III), or one of its suitably protected derivatives;

wherein R<sup>1</sup>-R<sup>7</sup> and n have the meaning according to one or more of claims 1 - 14 to obtain the corresponding sulfonamide and optionally, from the latter, the protective groups may be removed if necessary.

- 16. A process for obtaining a sulfonamide derivative of general formula (Ia) and/or (Ib) according to one or more of claims 1 14, wherein R¹-R⁴, R⁶-R³, n and A have the meaning according to one or more of claims 1 14, and R⁵ represents C₁-C₆ alkyl, characterized in that at least one compound of general formula (Ia) and/or at least one compound of general formula (Ib), wherein R¹-R⁴, R⁶-R³, n and A have the meaning according to one or more of claims 1 14, and R⁵ represents an hydrogen atom, is reacted with an alkyl halogenide or dialkyl sulfate.
- 17. A process for preparing the salts, preferably the physiologically acceptable salts of the compounds of general formula (Ia) and/or (Ib), according to one or more of claims 1 14, consisting in reacting at least one compound of the general formula (Ia) and/or at least one compound of the general formula (Ib) with a mineral acid or an organic acid in a suitable solvent.

- 18. A medicament comprising at least one compound according to one or more of claims 1 to 8 and optionally at least one or more of pharmacologically acceptable excipients.
- A medicament according to claim 18, for 5-HT<sub>6</sub> receptor regulation, for 19. 5 the prophylaxis and/or treatment of a disorder or disease related to food intake, preferably for the regulation of appetite, for the maintenance, increase or reduction of body weight, for the prophylaxis and/or treatment of obesity, bulimia, anorexia, cachexia or type II diabetes (non insulin dependent diabetes mellitus), preferably type II diabetes caused by 10 obesity, for the prophylaxis and/or treatment of gastrointestinal tract disorders, preferably irritable bowel syndrome, for cognitive enhancement, for the prophylaxis and/or treatment of disorders of the central nervous system, anxiety, panic disorders, depression, bipolar disorders, cognitive memory disorders, senile dementia processes, 15 neurodegenerative disorders, preferably Alzheimer's disease, Parkinson's disease, Huntington's disease and/or multiple sclerosis, schizophrenia, psychosis or infantile hyperkinesia (ADHD, attention deficit / hyperactivity disorder),

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preferably for 5-HT<sub>6</sub> receptor regulation, for the prophylaxis and/or treatment of a disorder or disease related to food intake, preferably for the regulation of appetite, for the maintenance, increase or reduction of body weight, for the prophylaxis and/or treatment of obesity, bulimia, anorexia, cachexia or type II diabetes (non insulin dependent diabetes mellitus), preferably type II diabetes caused by obesity, for the prophylaxis and/or treatment of gastrointestinal tract disorders, preferably irritable bowel syndrome.

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20. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for 5-HT<sub>6</sub> receptor regulation.

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21. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of a disorder or disease related to food intake.

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- The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the regulation of appetite.
  - 23. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the maintenance, increase or reduction of body weight.

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- 24. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of obesity.
- 25. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for prophylaxis and/or treatment of bulimia.
- 26. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of anorexia.
- 27. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of cachexia.
- 28. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of type II diabetes (non insulin dependent diabetes mellitus), preferably type II diabetes caused by obesity.

- 29. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of gastrointestinal tract disorders.
- The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of irritable bowel syndrome.
- The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of anxiety.
  - 32. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of depression.
  - 33. The use of at least one compound according to one more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of bipolar disorders.
  - 34. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of cognitive memory disorders.
- 25 35. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of senile dementia processes.
- 36. The use of at least one compound according to one or more of claims 1
  to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of Alzheimer's Disease.

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- 37. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of Parkinson's Disease.
- The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of Huntington's Disease.
- The use of at least one compound according to one or more of claims 1
   to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of dementias in which a cognitive deficit predominates.
  - 40. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of Multiple Sclerosis.
  - 41. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of psychosis.

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42. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of infantile hyperkinesia (ADHD, attention deficit / hyperactivity disorder).

- 43. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of disorders of the central nervous system.
- The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for the prophylaxis and/or treatment of schizophrenia.

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45. The use of at least one compound according to one or more of claims 1 to 8 for the manufacture of a medicament for cognitive enhancement.

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- A medicament comprising at least one compound according to one or more of claims 9 to 14 and optionally at least one or more of pharmacologically acceptable excipients.
- A medicament according to claim 46 for 5-HT<sub>6</sub> receptor regulation, for the 47. prophylaxis and/or treatment of a disorder or disease related to food 10 intake, preferably for the regulation of appetite, for the maintenance, increase or reduction of body weight, for the prophylaxis and/or treatment of obesity, bulimia, anorexia, cachexia or type II diabetes (non insulin dependent diabetes mellitus), preferably type II diabetes caused by obesity, for the prophylaxis and/or treatment of gastrointestinal tract 15 disorders, preferably irritable bowel syndrome, for cognitive enhancement, for the prophylaxis and/or treatment of disorders of the central nervous system, anxiety, panic disorders, depression, bipolar disorders, cognitive memory disorders, senile dementia processes, neurodegenerative disorders, preferably Alzheimer's disease, 20 Parkinson's disease, Huntington's disease and/or multiple sclerosis, schizophrenia, psychosis or infantile hyperkinesia (ADHD, attention deficit / hyperactivity disorder),
- preferably for cognitive enhancement, for the prophylaxis and/or treatment of disorders of the central nervous system, anxiety, panic disorders, depression, bipolar disorders, cognitive memory disorders, senile dementia processes, neurodegenerative disorders, preferably Alzheimer's disease, Parkinson's disease, Huntington's disease and multiple sclerosis, schizophrenia, psychosis or infantile hyperkinesia (ADHD, attention deficit / hyperactivity disorder).

- 48. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for 5-HT<sub>6</sub> receptor regulation.
- The use of at least one compound according to one or more of claims 9
   to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of a disorder or disease related to food intake.
  - 50. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the regulation of appetite.
  - 51. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the maintenance, increase or reduction of body weight.
- 15 52. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of obesity.
- 53. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of bulimia.
- 54. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of anorexia.
  - 55. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of cachexia.

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56. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of type II diabetes (non-insulin-dependent diabetes mellitus), preferably type II diabetes caused by obesity.

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- 57. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of gastrointestinal tract disorders.
- The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of irritable bowel syndrome.
- 59. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of anxiety.
  - 60. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of depression.
  - 61. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of bipolar disorders.

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- 62. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of cognitive memory disorders.
- The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of senile dementia processes.

- 64. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of Alzheimer's Disease.
- 5 65. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of Parkinson's Disease.
- 66. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of Huntington's Disease.
  - 67. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of Multiple Sclerosis.
  - 68. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of dementias in which a cognitive deficit predominates.
  - 69. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of psychosis.
- The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of infantile hyperkinesia (ADHD, attention deficit / hyperactivity disorder).
- The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of disorders of the central nervous system.

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72. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for the prophylaxis and/or treatment of schizophrenia.

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73. The use of at least one compound according to one or more of claims 9 to 14 for the manufacture of a medicament for cognitive enhancement.